

AVAILABLE COPY

Atty. Docket No. 2003-1201
 Serial No. 10/645.907
September 16, 2004

REMARKS

Favorable reconsideration is respectfully requested in view of the following remarks.

Claims 4 and 5 are rejected under 35 U.S.C. § 103(a) as obvious over Kimura in view of Watanabe. See item 6 on page 3 of the Office Action.

Claims 7, 15 and 16 are rejected under 35 U.S.C. § 103(a) as obvious over Kimura in view of Prickett. See item 7 on pages 3-4 of the Office Action.

Claims 17 and 18 are rejected under 35 U.S.C. § 103(a) as obvious over Kimura in view of Watanabe and Prickett. See item 8 on page 4 of the Office Action.

These rejections were respectfully traversed for the reasons set forth on pages 8-10 of the response filed July 28, 2004.

Further differences between the yarn of the instantly claimed invention and that of Prickett and Watanabe are discussed below.

I. Comparison of the yarn used for fabrics in Prickett with the yarn of the present invention:

Table 1

Parameters/properties of yarn	Yarn in Prickett reference	Yarn of the present invention
(a) Monofilament fineness	150-5900 dtex (cf. summary of the invention)	Not described (claim 1)
(b) Twist coefficient	Less than 26; 15-22 (column 3, line 13)	untwisted See Note 1 (below)
(c) Yarn form	Spinning yarn (column 2, line 15)	Crimped yarn (claim 1)
(d) Elongation percentage in stretch	Not described (presumably less than 4%) See Note 2 (below)	Not less than 6% (claim 1)
(e) Stretch modulus of elasticity	Not described	Not less than 40% (claim 1)

Atty. Docket No. 2003-1201
 Serial No. 10/645,907
September 16, 2004

Table 1 (cont.)

Parameters/properties of monofilaments in the yarn	Yarn in Prickett reference	Yarn of the present invention
(f) Form of monofilament	Staple fiber (column 2, line 15)	Filaments (original claim 8)
(g) Length of filaments	2.5 - 15.2 cm (column 2, lines 18-19)	Not limited (continuous filaments)
(h) Tenacity	Not described	0/15 - 3.5 N/tex (claim 1)

Note:

1. The heat-resistant high-functional fiber filaments of the present invention are untwisted yarns as apparent from the description on page 20, lines 12-21. The heat-resistant high-functional fiber filaments of the present invention are first twisted in a primary twisting step. Then, they are heat-set through treatment with high-temperature high-pressure steam or high-temperature high-pressure water or dry heat treatment. Finally, they are untwisted by twisting them in the direction opposite to the primary direction.

Thus, in contrast with the twisted filaments in the yarn of Prickett, the heat-resistant high-functional fiber filaments of the claimed invention are untwisted yarns.

2. In the case of filament yarns KEVLAR used in the examples of Prickett reference, the elongation at break is approximately 4%, and thus, the filament yarns KEVLAR cannot have an elongation in stretch of at least 6%. Please note that the elongation at break (Prickett) is quite different from the elongation in stretch (claimed invention). KEVLAR's elongation is elongation at break as apparent from the enclosed excerpt from Aromatic High-Strength Fibers, page 228. In contrast, the elongation of the claimed invention is elongation percentage in stretch.

Elongation percentage in stretch is measured according to the Test Method 8.11.A of JIS L1013 (1999). Enclosed herewith is a copy of the Test Method 8.11.A of JIS L1013 (1999) in Japanese, as well as an English translation of the relevant part of the Japanese text. The Examiner

Atty. Docket No. 2003-1201
 Serial No. 10/645,907
September 16, 2004

will see from this that elongation break is quite different from the elongation stretch. It will be appreciated that generally the value of elongation percentage in stretch is smaller than that of elongation at break. Therefore, it is apparent that KEVLAR's elongation percentage in stretch is at most 4%. As such, the filament yarns KEVLAR of Prickett cannot have an elongation percentage in stretch of at least 6% as claimed.

As apparent from the above comparison table 1, there are many differences between both yarns. Again, it should be emphasized that the crimped yarn of the instantly claimed invention has an excellent elongation percentage in stretch as compared to the yarn of Prickett. That is, the elongation percentage in stretch of the claimed yarn of the present invention is at least 6%, while that of the yarn of Prickett is at most 4%. Thus, Prickett fails to teach or suggest the excellent property in elongation percentage in stretch of at least 6% as claimed.

In addition, the yarn of the present invention is a crimped yarn, whereas, the Prickett discloses a spinning yarn (see column 2, line 15). Thus, Prickett fails to teach or suggest a crimped yarn.

Therefore, in addition to the reasons set forth in the prior response, the present invention is unobvious over Prickett for the reasons discussed above.

II. Comparison of the yarn used for a matric cloth of speaker damper of Watanabe with yarn of the present invention:

Table 2

Parameters/properties of yarn	Watanabe reference	Yarn of the present invention
(a) Yarn form	Not crimped	Crimped (claim 1)
(b) Elongation percentage in stretch	Not described	Not less than 6% (claim 1)

Atty. Docket No. 2003-1201
Serial No. 10/645,907
September 16, 2004

The present invention is directed to a crimped yarn. In contrast, Watanabe discloses a mixed yarn which may be filament yarn or spun yarn (see column 3, lines 39-43). Thus, Watanabe fails to teach or suggest a crimped yarn.

Furthermore, the characteristic feature of the instantly claimed crimped yarn is an elongation percentage in stretch of at least 6%. Watanabe is utterly silent as to elongation percentage in stretch.

Therefore, in addition to the reasons set forth in the prior response, the present invention is unobvious over Watanabe for the reasons discussed above.

CONCLUSION

In view of the foregoing amendments and remarks, the present application is in condition for allowance and early notice to that effect is hereby requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

Respectfully submitted,

Mitsuhiko TANAHASHI et al.

By: Warren M. Cheek, Jr.
Warren M. Cheek, Jr.
Registration No. 33,367
Attorney for Applicants

WMC/JFW/ksh
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
September 16, 2004